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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/065,757	05/24/1993	SHUNPEI YAMAZAKI	0756875	3615
22204	7590	11/05/2003	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			KOSLOW, CAROL M	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/065,757

Applicant(s)

YAMAZAKI, SHUNPEI

Examiner

C. Melissa Koslow

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-12,14,16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7,14,16,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 6, 8, 10, 11, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 07/120,144.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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The prosecution of this application, which was suspended on 25 November 1994, is now being resumed.

The indicated allowability of claims 1, 3, 5, 7, 12, 14, 16, 20 and 21 is withdrawn in view of the newly issued references listed below. Rejections based on the newly cited references follow.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5, 9, 12, 16 and 21 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. patent 6,630,425; U.S. Patent 6,635,603 or U.S. Patent 6,638,894.

The table, in all three patents, teaches superconducting ceramics whose formulas fall within the claimed formulas. The references teach the ceramics of the table have the claimed structure. The references teach the claimed ceramic.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,635,603 or U.S. Patent 6,638,894.

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Both of patents teach producing ceramics of the formula in claim 16 by mixing together stoichiometric amounts of powders of oxides and/or carbonates of the constituent metals and calcining or sintering the mixture at a temperature in the range of 700-950°C. The references do not teach compressing the mixture before sintering the mixture. One of ordinary skill in the art would have found it obvious to shape the mixture to ensure a more even temperature gradient through the mixture during calcination and/or to form a free-standing shape to minimize impurities that may leach from a crucible which is required when loose powder mixtures are calcined. The references suggest the claimed process. Both references teach compositions having the formula $M_2M'Cu_3O_{9-\delta}$, where δ is 1.5-2.4, M can be a mixture of Ba and either Sr or Ca and M' can be a mixture of Y, La, Eu, Lu and Sc. This formula suggests that of claim 14. Thus the references suggest the claimed ceramic and process.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,638,894.

This reference teaches a superconductor ceramic having the formula $BaCaM'Cu_3O_{9-\delta}$, where δ is 1.5-2.4 and M' can be Y. This suggests the composition of claim 7.

Claims 6, 8, 10, 11, 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Ceramics having the formulas of these claims are not taught or suggested by the cited art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (703) 308-3817. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (703) 308-3823.

The fax number for all official communications is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661 or (703) 308-0662.

After the move to the new USPTO headquarters in Alexandria Virginia, tentatively scheduled for the week of December 22, 2003, Ms. Koslow's telephone number will be (571) 272-1371 and Mr. Bell's telephone number will be (571) 272- 1362.

cmk
October 31, 2003

C. Melissa Koslow
Primary Examiner
Tech. Center 1700